

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the accompanying application of)
THOMAS J. REMANS, and)
INGRID M. VAN VEGCHEL)
This is a division of Serial No. 09/626,669)
filed July 27, 2000)
METHOD FOR IMPREGNATION OF MOLECULAR)
SIEVE - BINDER EXTRUDATES)

)

October 21, 2003

COMMISSIONER FOR PATENTS
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

PRELIMINARY AMENDMENT

Please add claims 17-25.

17. A catalytic dewaxing process comprising:
contacting a lubricating base oil under catalytic dewaxing conditions with a composition
made by

- a) contacting a molecular sieve - binder extrudate, having sorption sites, with an aqueous solution of a corresponding Group VIII metal nitrate salt having a pH of below 8 and in the essential absence of ammonium ions, wherein the molar ratio between the Group VIII metal cations in the solution and the number of sorption sites present in the extrudate is equal to or larger than 1, wherein the binder comprises a silica binder material, wherein the number of sorption sites in the molecular sieve-binder extrudate is reduced prior to the impregnation of the Group VIII metal by means of a dealumination treatment which treatment comprises contacting the molecular sieve-binder extrudate with a solution of ammonium hexafluorosilicate; and wherein the molecular sieve is in its H-form, and
- b) drying the molecular sieve - binder extrudate obtained from step a) in accordance with an accelerated drying profile by which the temperature of the molecular

sieve - binder extrudate obtained from step a) is raised to no more than 300°C and for a duration of less than 90 minutes prior to the use of the resulting dried, impregnated molecular sieve - binder extrudate, and

- c) yielding a product having a reduced pour point.

18. A process as recited in claim 17, wherein the molar ratio between the Group VIII metal cations and the number of sorption sites is between 1 and 20.

19. A process as recited in claim 18, wherein the Group VIII metal is Ni, Pt, and/or Pd.

20. A process as recited in claim 19, wherein the Group VIII metal nitrate salt is Ni(NO₃)₂, Pt(NH₃)₄(NO₃)₂ or Pd(NH₃)₄(NO₃)₂.

21. A process as recited in claim 20, wherein the molecular sieve is of the MFI, TON, MTT or MTW type.

22. A process as recited in claim 21, wherein step a) is performed with an aqueous solution of the corresponding Group VIII metal nitrate salt having a pH in the range from 3.5 to 7.

23. A process as recited in claim 22, wherein step a) is performed by pore volume impregnation.

24. A process as recited in claim 23, wherein the molecular sieve is in its H-form before impregnation.

25. A process as recited in claim 24, wherein the accelerated drying profile comprises the steps of:

raising the temperature of the molecular sieve - binder extrudate obtained from step a) at a rate in the range of from 10°C to 20°C per minute to a first temperature in the range of from 150°C to 200°C;

maintaining the first temperature for a time period in the range of from 5 to 15 minutes;

thereafter raising the temperature at a rate in the range of from 10°C to 40°C per minute to a second temperature in the range of from 250°C to 300°C;

maintaining the second temperature for a time period in the range of from 10 to 20 minutes; and

thereafter reducing the temperature.